


## PATENT COOPERATION TREATY

## PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT  
(PCT Article 36 and Rule 70)

Applicant's or agent's file reference PCT-140		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)																									
International application No. PCT/ES 03/00363	International filing date (day/month/year) 15.07.2003	Priority date (day/month/year) 15.07.2002																									
International Patent Classification (IPC) or both national classification and IPC C12N9/16																											
Applicant UNIVERSIDAD PUBLICA DE NAVARRA et al.																											
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input checked="" type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of 5 sheets.</p>																											
<p>3. This report contains indications relating to the following items:</p> <table border="0"><tr><td>I</td><td><input checked="" type="checkbox"/></td><td>Basis of the opinion</td></tr><tr><td>II</td><td><input type="checkbox"/></td><td>Priority</td></tr><tr><td>III</td><td><input checked="" type="checkbox"/></td><td>Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</td></tr><tr><td>IV</td><td><input type="checkbox"/></td><td>Lack of unity of invention</td></tr><tr><td>V</td><td><input checked="" type="checkbox"/></td><td>Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</td></tr><tr><td>VI</td><td><input type="checkbox"/></td><td>Certain documents cited</td></tr><tr><td>VII</td><td><input type="checkbox"/></td><td>Certain defects in the international application</td></tr><tr><td>VIII</td><td><input type="checkbox"/></td><td>Certain observations on the international application</td></tr></table>				I	<input checked="" type="checkbox"/>	Basis of the opinion	II	<input type="checkbox"/>	Priority	III	<input checked="" type="checkbox"/>	Non-establishment of opinion with regard to novelty, inventive step and industrial applicability	IV	<input type="checkbox"/>	Lack of unity of invention	V	<input checked="" type="checkbox"/>	Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement	VI	<input type="checkbox"/>	Certain documents cited	VII	<input type="checkbox"/>	Certain defects in the international application	VIII	<input type="checkbox"/>	Certain observations on the international application
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Date of submission of the demand  13.02.2004		Date of completion of this report  25.11.2004																									
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer  Scheffzyk-Sonnauer,  Telephone No. +49 89 2399-8602																									



**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT**

International application No. PCT/ES 03/00363

**I. Basis of the report**

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, Pages**

1-27 as originally filed

**Claims, Numbers**

1-33 filed with telefax on 01.10.2004

**Drawings, Sheets**

1/8-8/8 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).  
☐ the language of publication of the international application (under Rule 48.3(b)).  
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.  
☐ filed together with the international application in computer readable form.  
☐ furnished subsequently to this Authority in written form.  
☐ furnished subsequently to this Authority in computer readable form.  
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.  
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:  
☐ the claims, Nos.:  
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

**III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability**

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application,
- ☒ claims Nos. 3,18,29 complete and claims 1,2,5,6,7,8,9,10,11,12,13, 14, 15,16,17,19,21,22,23, 24, 25, 26, 27, 28, 31,32,33, partial  
because:
- ☐ the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (specify):
- ☐ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. are so unclear that no meaningful opinion could be formed (*specify*):
- ☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
- ☒ no international search report has been established for the said claims Nos. above-mentioned

2. A meaningful international preliminary examination cannot be carried out due to the failure of the nucleotide and/or amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative Instructions:

- ☐ the written form has not been furnished or does not comply with the Standard.
- ☐ the computer readable form has not been furnished or does not comply with the Standard.

**V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

1. Statement

Novelty (N)	Yes: Claims	12
	No: Claims	1,2,4-11,13-17,19-28, 30-33
Inventive step (IS)	Yes: Claims	12
	No: Claims	1,2,4-11,13-17,19-28,30-33
Industrial applicability (IA)	Yes: Claims	1,2,4-17,19-28,30-33
	No: Claims	

2. Citations and explanations

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see separate sheet

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/ES 03/00363

**SECTION III-----**

Only subject-matter related to enzyme(s) isolated from barey has been searched. Correspondingly, this IPER only deals with subject-matter which has been searched.

**SECTION V-----**

The molecular weight indicated in claim 12 is apparently the only distinguishing feature between the enzymes taught in WO-0157196 (1) and in PNAS, 18.07.01, vol. 97, no. 5, pp. 8705-8710 (2). Hence, said claim seems to be novel and inventive since the existence of an enzyme with said molecular weight was not derivable from (1) or (2).

The remaining claims, however, do not contain any feature() which would be suitable to render them distinguishable from the enzyme described in (1) or (2). With respect to the specific sequences recited in the claims it is noted that one cannot rule out that these sequences are intrinsic features of the enzymes taught in (1) or (2). This is particularly true since all other features (with exception of the molecular weight) mentioned in present application and in (1) or (2) are identical. Thus, for the time being present claims - with the exception of claim 12- do not meet the requirements of Art. 33(2)(3) PCT.

**Additional comments:**

In the absence of a reference point the term "reduced" is meaningless (see e.g. claim 32). In addition, claim 32 does not contain any feature which would be suitable to render the claimed plant distinguishable from the corresponding wild-type plant since modifications of the properties recited in said claim also may result from for instance varying environmental conditions.